# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Application by Verizon for Authorization	)	
Under Section 271 of the Communications	)	
Act to Provide In-Region, InterLATA	)	CC Docket No. 01-324
Services in the State of Rhode Island and	)	
Providence Plantations	)	
	)	

### DECLARATION OF CHRIS FRENTRUP ON BEHALF OF WORLDCOM, INC.

Based on my personal knowledge and on information learned in the course of my duties, I, Chris Frentrup, declare as follows:

#### I. INTRODUCTION AND SUMMARY

- 1. My name is Chris Frentrup. I am employed by WorldCom, Inc.

  ("WorldCom") as a Senior Economist in the Public Policy Analysis Group of the Federal

  Advocacy organization. In that position, I am responsible for analyzing economic issues relating to telecommunications industry regulation and public policy, and assisting in the development and advocacy of WorldCom's public policy positions. I have participated in the development and advocacy of the HAI Model, a model used to estimate telecommunications network costs. I also have worked extensively on the assessment of local exchange carrier productivity in the Commission's price cap proceedings.
- 2. The purpose of my Declaration is to demonstrate that Verizon's current unbundled switching rates in Rhode Island are not based on total element long run incremental cost ("TELRIC"), despite Verizon's claims to the contrary in its recently filed section 271

application. <u>See</u> Verizon-Rhode Island Brief at 89. In addition, I will show that the inputs used to set Verizon's loop rates are not compliant with TELRIC principles, and thus that those rates are also excessive

- 3. Concerning switching rates, many of the inputs used by Verizon in setting its port and end office switching usage rates are not consistent with TELRIC. Several of these inconsistencies were identified by the Rhode Island Public Utility Commission ("the PUC") in Order No. 16793. As noted in that Order, Verizon used unreasonably high switch materials and installation costs, and applied only the discounts associated with growth switches, to determine switching costs. These errors greatly overstated the cost of switching. Apparently recognizing that these inputs resulted in rates that exceeded any reasonable bound of TELRIC, Verizon agreed to cut switching usage rates to match the level that Verizon proposed in Massachusetts. However, Verizon did not cut its rate for the switch port.
- 4. Even with these proposed switch usage reductions, Verizon's total cost of switching remains unreasonably high. At \$4.15, Verizon's port rate in Rhode Island is about twice the current rates in New York and Massachusetts and four times the rates in Vermont and New Hampshire. Since the port and switch usage rates in Rhode Island were initially set using the same model and inputs, any errors that justify a cut in the switch usage rate apply equally well to the port rate. The combined effect of the port and switch usage rates leaves purchasers of unbundled network elements ("UNEs") paying a price for switching that is above TELRIC, and that is above the current rates in New York and Massachusetts, even after allowing for costs differences between the states.

<sup>1 &</sup>lt;u>See In re: Review of Bell Atlantic-Rhode Island TELRIC Study</u>, Docket No. 2681, Report and Order No. 16793 (R.I. Pub. Util. Comm'n November 18, 2001), VZ-RI App. F., Tab 34 ("PUC Order No. 16793"). This Order may also be downloaded at http://www.ripuc.state.ri.us/order/pdfs/VRI2681TELRICord16793.pdf.

- 5. The loop rates in Rhode Island were set using a number of inputs that are inconsistent with TELRIC. These inputs include the use of only fiber in the feeder, the use of other than GR-303 compliant digital loop carrier ("DLC"), low structure sharing percentages, and low fill factors. Use of these unreasonable inputs inflates the loop rates. The PUC has determined that these inputs should be changed, but has allowed Verizon to retain its high loop rates until the PUC completes a new cost case that will not even be filed before the earlier of 30 days after Verizon receives section 271 authority in Rhode Island or May 1, 2002.<sup>2</sup> It is uncertain when this proceeding would be completed, but it should be noted that the PUC took four years to adopt the inadequate UNE rates in this application. A similar delay would further harm competition both by leaving in place excessive rates and by yielding rates at the conclusion of the proceeding that would not be in line with the costs that would then exist.
- 6. Verizon's switching rates in Rhode Island remain above TELRIC and above the rates in New York and Massachusetts, even after allowing for cost differences between the states. Once New York completes its current review of UNE rates and an Administrative Law Judge's ("ALJ's") recommended decision currently before the New York Public Service Commission substantially cuts the UNE rates in New York the Rhode Island rates will be even further outside a reasonable range of TELRIC. In addition, Verizon's loop rates are set using inputs that are not consistent with TELRIC principles. The Commission should reject Verizon's application until Verizon's rates are corrected in line with the revised rates from the New York ALJ's recommended decision, or with the express requirement that any subsequent decrease in UNE rates in New York will be adopted in Rhode Island rates.

<sup>2</sup> Id. at 76.

### II. VERIZON'S INITIAL UNE RATES FOR SWITCHING IN RHODE ISLAND WERE UNREASONABLY HIGH AND BASED ON FLAWED INPUTS

- 7. Verizon initially set its switching rates using the Switching Cost Information System ("SCIS") model. In its review of the resulting rates, the PUC correctly identified several problems with the inputs that Verizon used in that model. First, the switch material costs used by Verizon in the SCIS model were significantly higher than other switch material costs introduced in the state record. In fact, the PUC required Verizon to show, in future TELRIC filings, why those other switch material costs should not be adopted.<sup>3</sup> Despite recognizing the excessive nature of the switch material costs, however, the PUC did not require Verizon to immediately revise its UNE switching rates to reflect the correct material costs.
- appropriate discount from the list price for the switch. Verizon used only the discount reflected in its contracts for purchases of growth switches. In the federal Universal Service proceeding, the Commission determined that the appropriate discount for TELRIC purposes was the discount for purchases of new switches.<sup>4</sup> While some states have used the new switch discount exclusively, most states have set UNE switching rates based on an average of the new and growth switch discounts.<sup>5</sup> The PUC determined that the appropriate discount would be based on 90 percent new and 10 percent growth switches, but the PUC then declined to require Verizon to revise its rates immediately to reflect this more appropriate discount.<sup>6</sup>

<sup>3</sup> Id. at 36.

<sup>4 &</sup>lt;u>See Federal-State Joint Board on Universal Service and Forward-Looking Mechanisms for High Cost Support for Non-Rural LECs, CC Docket Nos. 96-45, 97-160, Tenth Report & Order, 14 FCC CD 20156 (1999) at ¶ 317.</u>

<sup>5</sup> Of the states in which the Bell Operating Company has received 271 approval, only Missouri used solely growth discounts in determining switch costs.

<sup>6</sup> See PUC Order No. 16793 at 35.

- 9. In addition to these sources of inflated switch material costs, Verizon also overstates the costs of installing the switches. Verizon added 62.41% of the material costs of the switch to cover installation costs, based on its own experience in 1995. These installation costs reflected Verizon's practice in Rhode Island of installing its own switches, rather than the more common practice of having the switch vendor handle the installation. Recognizing that this installation factor is overstated, the PUC ordered Verizon to supply in future TELRIC filings the installation factors for all Verizon companies, to allow the PUC to assess the reasonableness of the factor used.<sup>7</sup> Despite this concern over the correctness of the installation factor used by Verizon, the PUC did not require Verizon to revise its switch installation factor.
- 10. Even if Verizon had correctly determined the material costs of the switch, its use of this inflated installation factor would overstate switch costs. Of course, as shown supra, the switch material costs are overstated, which means that determining installation costs by applying a factor to those inflated material costs will further overstate the switch costs.

  Thus, Verizon's costs of installing switches are overstated in two ways applying a factor that is too large to a base of materials costs that is too large. Despite acknowledging these facts, the PUC has not required Verizon to correct these errors before giving its section 271 endorsement.
- 11. Unfortunately, we are unable to quantify the effect of correcting these errors. Verizon has not provided in the record in this proceeding the electronic versions of its cost models, nor of the inputs it used in those models. Without access to that information, we cannot provide revised cost outputs from the model.

<sup>7</sup> Id. at 36.

## III. VERIZON'S PROPOSED REDUCTION IN SWITCH USAGE RATES DOES NOT MAKE ITS SWITCHING RATES TELRIC-COMPLIANT

- 12. In apparent recognition of the fact that its switching rates were excessive for the reasons discussed above, Verizon agreed to reduce its switch usage rates to the rates that it has proposed in Massachusetts. However, these reductions are not sufficient to bring Verizon's switching rates down to TELRIC levels.
- 13. As an initial matter, Verizon has made no showing that its offered switch usage reduction is equivalent to the reduction that would occur were it to correct the problems identified by the PUC. Nor has it made available to the Commission or other interested parties in this proceeding the inputs and SCIS model, to allow a determination of the effect of correcting those problems. Until it does so, the correctness of the switch usage rate must remain mere speculation.
- switch usage and port rates were set using the same model and inputs; any error that resulted in excessive usage rates would also have caused excessive port rates. The justification given by Verizon for not also cutting its port rate is that a loop and a port will always be bought together, and the sum of the loop and port rates in Rhode Island is lower than the sum of those rates in New York, after allowing for cost differences. This alleged justification is irrelevant. The loop and port rates were set using completely different cost models, so there is no connection between the cost levels produced for loops and switches. The loop rates must be shown to be at TELRIC levels on their own, and the switch usage and port rates must be shown to be at TELRIC levels on their own.

<sup>8</sup> See In re: Unbundled Local Switching Rates Verizon-Rhode Island's Section 271 Compliance Filing, Docket No.

usage rate – are in fact higher in Rhode Island than they are in either New York or

Massachusetts, even after allowing for the cost differences among the states as measured by the

Commission's Synthesis Model. For example, for the total cost of switching, i.e., the sum of
usage and port, Rhode Island costs are 10.4 percent to 16.5 percent lower than in New York,
while rates in Rhode Island are 15.3 percent higher than in New York. The excessive level of
the switching rates is even more apparent when Rhode Island rates are compared to the rates
recommended by the ALJ in New York – Rhode Island rates are almost 134 percent higher than
New York rates, when they should be lower. Similarly, the total switching rate in Rhode Island
is 19 percent above the Massachusetts rate, even though Rhode Island costs are less than 5
percent above Massachusetts costs. Clearly, even though Verizon has cut its switch usage rates,
its excessive port rate means that UNE customers will still be paying rates that are well above
TELRIC levels.

<sup>3363,</sup> Order No. 16799, (R.I. Pub. Utils. Comm'n November 28, 2001) at 4. The order can be downloaded at http://www.ripuc.state.ri.us/order/pdfs/VRI271-UNEord16799.pdf.

<sup>9</sup> The Commission has previously determined whether UNE rates in a state fall within a "reasonable range of TELRIC" by comparing the relationship between the rates and the costs as measured by the Synthesis Model, which was developed by the Commission for the Universal Service proceeding. The Commission accepted New York and Texas rates as TELRIC-compliant in the section 271 proceedings for those two states. Since those two states were approved, the Commission has accepted other states' UNE rates as TELRIC-compliant so long as the other state's UNE rates were not above New York's or Texas' rates by more than were the Synthesis Model's costs for the states. See, e.g., Joint Application by SBC Communications Inc., Southwestern Bell Tel. Co., and Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, Memorandum Opinion and Order, 16 FCC CD 6237, 6277 (2001) at ¶ 84.

<sup>10</sup> The percent difference depends on whether the comparison is with raw or adjusted Synthesis Model (SM) costs. The raw SM costs are taken directly from the model results from the FCC. The adjusted results remove \$3.62 per line of retail overhead, and re-apportion the remaining wholesale overhead among all rate elements, rather than loading them only on the loop as the Synthesis Model does.

Table 1

Table	<b>C</b> 1		
	Port	Usage	Port + Usage
Raw USF SM Cost			
RI	0.7622	1.1872	1.9494
MA	0.8002	1.0648	1.8650
NY	0.8055	1.3694	2.1749
Adjusted USF SM Cost			
RI	0.9982	1.5547	2.5529
MA	1.0816	1.4394	2.5211
NY	1.1319	1.9243	3.0562
UNE Rates	•		
RI	4.15	5.11	9.26
MA	2.00	5.78	7.78
NY	2.50	5.53	8.03
NY ALJ RD	1.87	2.09	3.96
Ratio of RI to:			
NY Raw USF SM Cost	94.6%	86.7%	89.6%
NY Adjusted USF SM Cost	88.2%	80.8%	83.5%
MA Raw USF SM Cost	95.3%	111.5%	104.5%
MA Adjusted USF SM Cost	92.3%	108.0%	101.3%
NY UNE Rates	166.0%	92.3%	115.3%
ALJ RD UNE Rates	221.9%	244.6%	233.9%
MA UNE Rates	207.5%	88.4%	119.0%
TELRIC Compliance Test	,		
RI compared to NY Rates			
Raw USF SM Cost	Fail	Fail	Fail
Adjusted USF SM Cost	Fail	Fail	Fail
RI compated to NY ALJ RD Rates			
Raw USF SM Cost	Fail	Fail	Fail
Adjusted USF SM Cost	Fail	Fail	Fail
RI compared to MA Rates Raw USF SM Cost	Fail	Doco	Ecil
Adjusted USF SM Cost	Fail	Pass Pass	Fail Fail
Aujusteu USF Sivi CUSt	rall	газэ	rall

### IV. LOOP RATES IN RHODE ISLAND ARE NOT TELRIC-COMPLIANT

16. In addition to the problems identified with the switching costs <u>supra</u>, there are a number of problems with the inputs used to determine loop rates. Again, it is not possible to quantify the effect of these inputs on loop rates, because Verizon has not provided in its 271

filing the cost models and precise inputs used to develop loop rates. However, it is clear that these changes would lower loop costs. Until these changes are implemented, Verizon's loop rates remain above TELRIC levels.

- 17. First, Verizon uses only fiber cable in the feeder. While this often will be the lowest cost, most efficient forward-looking technology, in some cases, primarily those situations in which customers are located close to the central office, copper feeder may be cheaper. The Commission's Synthesis Model and other states' loop models all use at least some copper feeder.
- when it uses fiber feeder. As the PUC rightly determined, GR-303 compliant DLC is the forward-looking technology, and should be employed in any cost model used to set TELRIC UNE rates. Verizon's loop cost model used no GR-303 DLC, instead relying on the older universal DLC. Verizon must revise its loop rates to reflect GR-303 DLC before its UNE loop rates can be consistent with TELRIC principles. Use of GR-303 DLC is doubly important because it will lower both recurring and non-recurring costs by enabling electronic loop reassignment.
- 19. Similarly, Verizon's loop rates do not reflect the forward-looking amount of structure sharing that would occur in an efficient network. Rather than recognizing the incentives for greater structure sharing that would occur in a more competitive market, Verizon has apparently relied on its historical sharing levels. The PUC directed that future TELRIC studies should reflect sharing that could be achieved, but allowed Verizon to set its rates based

<sup>11</sup> See PUC Order No. 16793 at 43.

on its current levels of structure sharing.<sup>12</sup> The amount of structure sharing must be adjusted to be consistent with TELRIC principles and UNE loop rates recomputed.

- 20. Finally, the fill factors assumed by Verizon for fiber and copper cable are unreasonably low, resulting in overstated loop costs. The PUC determined that Verizon's fill factors were too low, and required the use of alternative fill factors based on its staff's analysis in any future TERLIC compliance filing.<sup>13</sup> Those fill factors have not yet been incorporated into Verizon's loop rates. Thus, Verizon's loop rates are not compliant with TELRIC principles.
- 21. As in the case of the switching rates, we have not been provided access in this proceeding to the cost models or inputs used to set the loop rates. Without this information, we are unable to quantify the effect of changing these inputs. However, it is certain that correcting these errors would lower loop rates.

#### V. CONCLUSION

22. Verizon's switching and loop UNE rates exceed TELRIC levels and are not reasonable. Even though Verizon plans to cut its switch usage rates to the level proposed for those rates in Massachusetts, the total cost of switching, which includes both usage and port, remains well above TELRIC levels. The PUC has itself identified specific inputs used in setting loop and switching rates that make the rates too high. Until these inputs are corrected and rates reduced to appropriate levels, the Commission should reject Verizon's section 271 application.

<sup>12 &</sup>lt;u>Id</u>. at 44-5.

<sup>13 &</sup>lt;u>Id</u>. at 51.

I declare under penalty of perjury that the foregoing is true and correct.	Executed or
December 17, 2001.	

This concludes my Declaration on behalf of WorldCom.

Chris Frentrup

23.